

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

(LM 2001)

MARCH 2018

Sub. Code: 2001

**B.PHARM. DEGREE EXAMINATION
PCI Regulation SEMESTER – I
PAPER I – HUMAN ANATOMY AND PHYSIOLOGY – I**

Q.P. Code: 562001

Time: Three hours

Maximum: 75 Marks

I. Elaborate on: Answer any TWO questions. (2 x 10 = 20)

1. Write about the structure and functions of Autonomic Nervous System.
2. a) Explain in detail about WBC.
b) Reticulo-endothelial system.
3. Explain the classification, structure, location and functions of Epithelial tissues.

II. Write notes on: Answer any SEVEN questions. (7 x 5 = 35)

1. Describe the physiology of vision.
2. Formation, circulation and composition of lymph.
3. Describe various types of muscular tissues.
4. Explain the different types of Anaemia.
5. Explain about synovial joints.
6. Structure and function of skin.
7. Write about conduction system of heart.
8. Explain the bones of the Skull.
9. Explain the factors involved in the regulation of blood pressure.

III. Short answers on: Answer ALL questions. (10 x 2 = 20)

1. Function of bones.
2. Hemophilia.
3. Congestive heart failure.
4. Cardiac output.
5. Defects in the ear.
6. Hypertension.
7. Function of Ribosomes.
8. Spinal nerves.
9. Name the facial bones.
10. Fate of RBC.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

(LN 2001)

SEPTEMBER 2018

Sub. Code: 2001

B.PHARM. DEGREE EXAMINATION

PCI Regulation SEMESTER – I

FIRST YEAR

PAPER I – HUMAN ANATOMY AND PHYSIOLOGY – I

Q.P. Code: 562001

Time: Three hours

Maximum: 75 Marks

I. Elaborate on: Answer any TWO questions.

(2 x 10 = 20)

1. Draw a neat labelled diagram of Heart. Explain in detail about it.
2. Describe in detail about various pathways of clotting and add a note on functions of blood.
3. a) Composition and function of lymph.
b) Explain about connective tissues.

II. Write notes on: Answer any SEVEN questions.

(7 x 5 = 35)

1. Write about Homeostasis.
2. Discuss about cardiac cycle and its sequences.
3. Define Joint? Classify it with examples.
4. Blood grouping and its significance.
5. Regulation of blood pressure.
6. Describe the structure and function of cell.
7. Physiology of muscle contraction.
8. Haemoglobin.
9. Neurotransmitters of ANS.

III. Short answers on: Answer ALL questions.

(10 x 2 = 20)

1. What is Electrocardiogram and mention its significance?
2. Mention about Cell junction.
3. Rh Factor.
4. Heart sounds.
5. Bones of Vertebral column.
6. Glaucoma.
7. Layers of skin.
8. List out the basic life processes.
9. Function of platelets.
10. Erythroblastosis Foetalis.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

(LO 2001)

MARCH 2019

Sub. Code: 2001

**B.PHARM. DEGREE EXAMINATION
PCI Regulation SEMESTER – I
PAPER I – HUMAN ANATOMY AND PHYSIOLOGY – I**

Q.P. Code: 562001

Time: Three hours

Maximum: 75 Marks

I. Elaborate on: Answer any TWO questions. (2 x 10 = 20)

1. Draw a neat labeled structure of cell and mention its function.
2. Write in details about salient features and functions of bones of axial and appendicular skeletal system.
3. Describe anatomy of heart and write in detail about blood circulation.

II. Write notes on: Answer any SEVEN questions. (7 x 5 = 35)

1. Structure and function of nervous tissue.
2. Function of tissues.
3. Describe the division of skeletal system, functions of skin.
4. Immovable joint.
5. Erythropoiesis.
6. Function of lymphatic system.
7. Function of parasympathetic system.
8. Regulation of Blood pressure.
9. Write anatomy of ear.

III. Short answers on: Answer ALL questions. (10 x 2 = 20)

1. Anaemia.
2. Cardiac cycle.
3. Purpura.
4. Polycythemia.
5. Gout.
6. Olfaction.
7. Hypoxia.
8. Angina pectoris.
9. Blood group.
10. Myopia.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

(LP 2001)

SEPTEMBER 2019

Sub. Code: 2001

**B.PHARM. DEGREE EXAMINATION
PCI Regulation SEMESTER – I
PAPER I – HUMAN ANATOMY AND PHYSIOLOGY – I**

Q.P. Code: 562001

Time: Three hours

Maximum: 75 Marks

I. Elaborate on: Answer any TWO questions. (2 x 10 = 20)

1. What are Lymph nodes? Write about the structure and functions of lymph nodes.
2. Explain the structure of eye with a neat labeled diagram. Describe the physiology of vision.
3. Define and classify joints with necessary examples.

II. Write notes on: Answer any SEVEN questions. (7 x 5 = 35)

1. Explain homeostasis.
2. Classify connective tissues with example.
3. Explain the physiology of muscle contraction.
4. Write the composition and functions of blood.
5. Short notes on eye disorders.
6. Cardiac Arrhythmia.
7. Neuromuscular Junction.
8. Types of bones and its salient features.
9. Add notes on blood transfusion.

III. Short answers on: Answer ALL questions. (10 x 2 = 20)

1. Functions of lysosomes.
2. Classification of vertebral bones.
3. Refractory period.
4. Action potential.
5. Ear ossicles.
6. Tastants.
7. Peyer's patches.
8. Mitosis.
9. Pulse.
10. Arteriosclerosis.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[LR 0121]

JANUARY 2021

Sub. Code: 2001

(MARCH 2020 EXAM SESSION)

B. PHARMACY DEGREE EXAMINATION

PCI Regulation SEMESTER – I

PAPER I – HUMAN ANATOMY AND PHYSIOLOGY - I

Q.P. Code: 562001

Time: Three hours

Maximum: 75 Marks

I. Elaborate on: Answer any TWO questions.

(2 x 10 = 20)

1. Structure and functions of Skin.
2. Describe the outflow and functions of Autonomic nervous system with special reference to Sympathetic division.
3. Define Blood Pressure. Explain the various methods of measuring Blood Pressure. Write a note on factors affecting Blood Pressure.

II. Write notes on: Answer any SEVEN questions.

(7 x 5 = 35)

1. Discuss physiology of Cell membrane.
2. Write notes on the Vertebral bones.
3. Functions of Platelets.
4. Physiology of heart.
5. Hepatic circulation.
6. Mechanism of Skeletal muscle contraction.
7. Sacrum and Coccyx.
8. Cranial nerves and its functions.
9. Explain Auditory and Non-Auditory functions of Ear.

III. Short answers on: Answer ALL questions.

(10 x 2 = 20)

1. Ganglia.
2. Synapse.
3. Hypoxia.
4. Functions of Ribosomes.
5. Composition of Lymph.
6. Fate of red blood cells.
7. Retina.
8. Bones of skull.
9. Glaucoma.
10. Thalassaemia.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[BPHARM 0921]

**SEPTEMBER 2021
(SEPTEMBER 2020 EXAM SESSION)**

Sub. Code: 2001

**B.PHARM. DEGREE EXAMINATION
PCI Regulation 2017 – SEMESTER I
PAPER I – HUMAN ANATOMY AND PHYSIOLOGY - I
*Q.P. Code: 562001***

Time: Three hours

Maximum: 75 Marks

I. Elaborate on: Answer any TWO questions. (2 x 10 = 20)

1. Define Erythropoiesis. Explain the factors influencing Erythropoiesis.
2. Give an account of anatomy and physiology of the Parasympathetic branch of autonomic nervous system.
3. Write the help of a neat labeled diagram explain bones of Skull.

II. Write notes on: Answer any SEVEN questions. (7 x 5 = 35)

1. Describe various types of Muscular tissue.
2. Write a note on Lymph node.
3. Discuss the mechanism of Clotting.
4. Write a note on Megaloblastic anaemia and Iron deficiency anaemia.
5. Physiology of Audition.
6. Explain role of Baroreceptors and its functions.
7. Write a note on Neuromuscular junction.
8. Explain the Physiology behind Vision formation.
9. Write a note on disorders of White Blood Corpuscle.

III. Short answers on: Answer ALL questions. (10 x 2 = 20)

1. Diseases of Eye
2. Cardiac cycle
3. Composition of blood
4. Pulmonary circulation
5. Hypertension
6. Action potential
7. Types of Joints
8. Functions of Skin
9. Presbyopia
10. Christmas factor.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[BPHARM 0122]

**JANUARY 2022
(MARCH 2021 EXAM SESSION)**

Sub. Code: 2001

B.PHARMACY DEGREE COURSE (SEMESTER EXAMINATIONS)

PCI Regulation 2017 – SEMESTER I

PAPER I – HUMAN ANATOMY AND PHYSIOLOGY - I

Q.P. Code: 562001

Time: Three hours

Maximum: 75 Marks

I. Elaborate on: Answer any TWO questions.

(2 x 10 = 20)

1. Define Synapse? Enumerate the types of Synapses and describe Synaptic transmission.
2. Classify Blood groups. Add a note on importance of Blood grouping and Rhesus factor.
3. What is Circulation? Explain the Anatomy of blood vessels, add notes on the blood supply to Heart.

II. Write notes on: Answer any SEVEN questions.

(7 x 5 = 35)

1. Describe the structure and functions of Epithelial tissue.
2. Write a note on various types of Anaemia.
3. Composition and functions of Lymph.
4. Functions of Plasma proteins.
5. Physiology of vision and disorders of Eye.
6. Pulmonary circulation and its functions.
7. Describe conducting system of Heart.
8. Sense of taste and physiology of taste in brief.
9. Bones of Skull.

III. Short answers on: Answer ALL questions.

(10 x 2 = 20)

1. Pancytopenia
2. Von Willebrand disease
3. Circumduction
4. Rods and Cones
5. Diseases of Eye.
6. Functions of Skeleton
7. Neuromuscular junction
8. Christmas factor
9. Presbycusis
10. Functions of Skin.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[BPHARM 0522]

**MAY 2022
(SEPTEMBER 2021 EXAM SESSION)**

Sub. Code: 2001

**B.PHARM. DEGREE EXAMINATION
PCI Regulation 2017 – SEMESTER I
PAPER I – HUMAN ANATOMY AND PHYSIOLOGY - I
Q.P. Code: 562001**

Time: Three hours

Maximum: 75 Marks

I. Elaborate on: Answer any TWO questions. (2 x 10 = 20)

1. Explain the anatomy of Tongue.
2. Explain detail about Peripheral nervous system.
3. Explain the structure, function and disorder of Nose.

II. Write notes on: Answer any SEVEN questions. (7 x 5 = 35)

1. Describe the salient features and function of Bone.
2. Write a note on Cranial nerves.
3. Composition and functions of Lymph.
4. Functions of Plasma proteins.
5. Physiology of vision and disorders of Eye.
6. Write a note on ECG.
7. Describe conducting system of Heart.
8. Sense of taste and physiology of taste in brief.
9. Synovial joint.

III. Short answers on: Answer ALL questions. (10 x 2 = 20)

1. Function of Spleen.
2. Cell communication.
3. Circumduction.
4. Rods and Cones.
5. Hypertension.
6. Functions of Skin.
7. Neuromuscular junction.
8. Christmas factor.
9. Cochlea.
10. Blood groups.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[BPHARM 1022]

**OCTOBER 2022
(MARCH 2022 EXAM SESSION)**

Sub. Code: 2001

B.PHARMACY DEGREE COURSE (SEMESTER EXAMINATIONS)

PCI Regulation 2017 – SEMESTER I

PAPER I – HUMAN ANATOMY AND PHYSIOLOGY I

Q.P. Code: 562001

Time: Three hours

Maximum: 75 Marks

I. Elaborate on: Answer any TWO questions.

(2 x 10 = 20)

1. a) Discuss in details about the different types of Connective tissue.
b) Structure and functions of Nervous tissues.
2. Explain about the process of cell division and mutation.
3. Discuss in Details about the Mechanism of Blood Clotting.

II. Write notes on: Answer any SEVEN questions.

(7 x 5 = 35)

1. Classify the different types of Bones.
2. Write the composition and functions of blood.
3. Explain about Portal Circulation.
4. Discuss about the Cranial Nerves and its Functions.
5. Explain in details about the formation of Haemoglobin.
6. Write is details with structure about inner Ear.
7. Explain in details about different about Cell Junctions.
8. Explain in details about the Conduction system of Hearts.
9. Explain the Cardiac Cycle.

III. Short answers on: Answer ALL questions.

(10 x 2 = 20)

1. Functions of Skin.
2. Name the Muscle Proteins.
3. Rh Factor.
4. What are the various Heart Valves?
5. Endocrine cell signalling.
6. Role of Erythropoietin.
7. What is ECG?
8. Rouleaux formation.
9. Auditory Ossicles.
10. Myocardial infarction.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[B.PHARM 0323]

**MARCH 2023
(SEPTEMBER 2022 EXAM SESSION)**

Sub. Code: 2001

B.PHARMACY DEGREE COURSE (SEMESTER EXAMINATIONS)

PCI Regulation 2017 – SEMESTER I

PAPER I – HUMAN ANATOMY AND PHYSIOLOGY I

Q.P. Code: 562001

Time: Three hours

Maximum: 75 Marks

I. Elaborate on: Answer any TWO questions. (2 x 10 = 20)

1. Discuss in details about various types of epithelial tissues.
2. a. Write notes on Cardiac Muscles.
b. Explain about ECG.
3. Draw a diagram to show the structure of Skin and describe the functions of Skin.

II. Write notes on: Answer any SEVEN questions. (7 x 5 = 35)

1. Write notes on the physiology of skeletal muscle contraction.
2. Explain the Cardiac Cycle.
3. Explain the Transport mechanism across cell membrane.
4. Write note the Physiology of Hearing.
5. Define and classify the different types of Anaemia.
6. Write notes on Coagulation factors and their role.
7. Describe the Parasympathetic nerve outflow and its Functions.
8. Discuss the structure of Synovial Joints.
9. Write notes on Blood grouping and its significance.

III. Short answers on: Answer ALL questions. (10 x 2 = 20)

1. Functions of Cell.
2. What are Rods and Cones?
3. List out the basic life processes.
4. Hyaline cartilage.
5. Composition of Lymph.
6. What are the Various Heart sounds?
7. Desmosome.
8. Name the cranium bones of Skull.
9. Define Olfaction and Gustation.
10. Haemophilia.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[B.PHARM 0823]

**AUGUST 2023
(MARCH 2023 EXAM SESSION)**

Sub. Code: 2001

B.PHARMACY DEGREE COURSE (SEMESTER EXAMINATIONS)

PCI Regulation 2017 – SEMESTER I

PAPER I – HUMAN ANATOMY AND PHYSIOLOGY – I

Q.P. Code: 562001

Time: Three hours

Maximum: 75 Marks

I. Elaborate on: Answer any TWO questions. (2 x 10 = 20)

1. Define tissue. Explain the various types of tissue and its function.
2. Draw a neat labeled diagram of ear and write the mechanism of equilibrium.
3. A) Define the structure and function of Skin.
B) Blood grouping and its significance.

II. Write notes on: Answer any SEVEN questions. (7 x 5 = 35)

1. Explain Cardiac Cycle.
2. Types of synovial joints.
3. Write a note about hemoglobin.
4. Explain Tongue.
5. Electrocardiogram.
6. Write a note on cranial nerves.
7. Mechanism of coagulation.
8. Cell division.
9. Reticulo-endothelial system.

III. Short answers on: Answer ALL questions. (10 x 2 = 20)

1. Composition of lymph.
2. Function of bone.
3. Homeostasis.
4. Heart sound.
5. Function of mitochondria.
6. Retina.
7. Function of spleen.
8. Hypertension.
9. Cyanosis.
10. Rheumatoid arthritis.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[B.PHARM 1223]

**DECEMBER 2023
(SEPTEMBER 2023 EXAM SESSION)**

Sub. Code: 2001

**B.PHARMACY DEGREE COURSE (SEMESTER EXAMINATIONS)
PCI Regulation 2017 – SEMESTER I
PAPER I – HUMAN ANATOMY AND PHYSIOLOGY – I**

Q.P. Code: 562001

Time: Three hours

Maximum: 75 Marks

I. Elaborate on: Answer any TWO questions. (2 x 10 = 20)

1. Write notes on Cranial and Spinal neurons, add notes on neurotransmitters of peripheral nervous system.
2. Discuss in details about the Mechanism of Blood Coagulation. What are the Factors involved it?
3. Describe the structure of Ear with the help of a diagram. What are the functions of its different parts?

II. Write notes on: Answer any SEVEN questions. (7 x 5 = 35)

1. Explain in details about the different types of Cell Communication.
2. Describe the various types of Muscular tissues.
3. Write a note on the bones of the Skull with diagram.
4. Explain the Regulation of Blood Pressure by Renal Mechanism.
5. Explain details of Erythropoiesis.
6. Write short notes on Spinal nerves.
7. Explain the Structure and function of artery and veins.
8. Explain the Cardiac Cycle.
9. Describe the Sympathetic nerve outflow and its functions.

III. Short answers on: Answer ALL questions. (10 x 2 = 20)

1. Define Mitosis and Meiosis.
2. Different types of Cartilages.
3. Neuromuscular Junction.
4. Atherosclerosis.
5. Define Homeostasis.
6. Thalassaemia.
7. Define Glaucoma.
8. Functions of Spleen.
9. Define Cardiac output.
10. Functions of Bones.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[B.PHARM 0524]

MAY 2024

Sub. Code: 2001

B.PHARMACY DEGREE COURSE (SEMESTER EXAMINATIONS)

PCI Regulation 2017 – SEMESTER I

PAPER I – HUMAN ANATOMY AND PHYSIOLOGY – I

Q.P. Code: 562001

Time: Three hours

Maximum: 75 Marks

I. Elaborate on: Answer any TWO questions.

(2 x 10 = 20)

1. A) Composition and functions of blood.
B) Hemopoiesis.
2. Write in detail about the structure and functions of eye.
3. Give an account on:
a) Epithelial tissue.
b) Connective tissue.

II. Write notes on: Answer any SEVEN questions.

(7 x 5 = 35)

1. Skull.
2. Forms of intracellular signaling.
3. Glands of Skin.
4. Disorders of blood.
5. Reticulo Endothelial system.
6. Lymph.
7. Spinal nerves.
8. Blood pressure and its regulation.
9. Conduction system of heart.

III. Short answers on: Answer ALL questions.

(10 x 2 = 20)

1. Prone and supine positions.
2. Name two types of feed back mechanisms.
3. Diffusion.
4. Phagocytosis.
5. Structure of Neuron with parts.
6. Melanocytes.
7. Parts of scapula.
8. Erythroblastosis foetalis.
9. What do you mean by Angina pectoris?
10. Glaucoma.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[B.PHARM 1024]

**OCTOBER 2024
(SEPTEMBER 2024 EXAM SESSION)**

Sub. Code: 2001

B. PHARMACY DEGREE COURSE (SEMESTER EXAMINATIONS)

PCI Regulation 2017 – SEMESTER I

PAPER I – HUMAN ANATOMY AND PHYSIOLOGY – I

Q.P. Code: 562001

Time: Three hours

Maximum: 75 Marks

I. Elaborate on: Answer any TWO questions.

(2 x 10 = 20)

1. Write the function of blood and explain detail about composition of blood.
2. Explain the structure and function of Skin.
3. Define blood pressure. Write about the various factors that regulate blood pressure.

II. Write notes on: Answer any SEVEN questions.

(7 x 5 = 35)

1. Describe the types of epithelial tissue.
2. Disorders of Blood.
3. Conduction system of heart.
4. Discuss the physiology of cell membrane.
5. Explain Tongue.
6. Classify bone with example.
7. Systemic circulation.
8. Spleen.
9. Physiology of audition.

III. Short answers on: Answer ALL questions.

(10 x 2 = 20)

1. Function of WBC.
2. Disorder of Joints.
3. Types of valves in the heart.
4. Olfactory pathway.
5. Lymph node.
6. Connective tissue.
7. Erythrocyte sedimentation rate.
8. Platelets.
9. Ganglion.
10. Endocardium.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[B.PHARM 0325]

MARCH 2025

Sub. Code: 2001

B. PHARMACY DEGREE COURSE (SEMESTER EXAMINATIONS)

PCI Regulation 2017 – SEMESTER I

PAPER I – HUMAN ANATOMY AND PHYSIOLOGY – I

Q.P. Code: 562001

Time: Three hours

Maximum: 75 Marks

I. Elaborate on: Answer any TWO questions.

(2 x 10 = 20)

1. Draw a neat labeled diagram of ear and explain the physiology of hearing.
2. a) Explain about connective tissues. b) Explain Cardiac cycle.
3. What are the divisions of ANS. Write the structure and functions of sympathetic and parasympathetic nervous system.

II. Write notes on: Answer any SEVEN questions.

(7 x 5 = 35)

1. Explain about synovial joints.
2. What is ECG? Briefly explain each component of ECG.
3. Discuss the functions of lysosomes, ribosomes and golgi complex.
4. Explain pulmonary and systemic circulation with diagram.
5. Write a note on cranial nerves.
6. Disorders of Nose.
7. Explain role of Baroreceptors and its functions.
8. Write a note on Neuromuscular Junctions.
9. Write a note on lymph node.

III. Short answers on: Answer ALL questions.

(10 x 2 = 20)

1. Write the functions of Nucleus.
2. Write the functions of plasma membrane.
3. Name the bones of Cranium.
4. Congestive heart failure.
5. Name the bones of upper limb.
6. Mention two differences between artery and vein.
7. Explain intra cellular signaling.
8. Write is synaptic cleft. State its functions.
9. Define passive and active transport.
10. Write the difference between smooth muscle and cardiac muscle.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[B.PHARM 0925]

SEPTEMBER 2025

Sub. Code: 2001

B. PHARMACY DEGREE COURSE (SEMESTER EXAMINATIONS)

PCI Regulation 2017 – SEMESTER I

PAPER I – HUMAN ANATOMY AND PHYSIOLOGY – I

Q.P. Code: 562001

Time: Three hours

Maximum: 75 Marks

I. Elaborate on: Answer any TWO questions.

(2 x 10 = 20)

1. Describe in detail about various pathways of clotting and add a note on functions of blood.
2. a) Explain in details about Reticulo-endothelial system.
b) Regulation of blood pressure.
3. Describe anatomy of heart and write in details about blood circulation.

II. Write notes on: Answer any SEVEN questions.

(7 x 5 = 35)

1. Define joints. Classify it with examples.
2. Physiology of muscle contraction.
3. Explain the composition and functions of lymph.
4. Write about Homeostasis.
5. Describe the physiology of vision.
6. Explain disorder of blood.
7. Write brief note on ABO system of blood grouping.
8. Draw a neat labeled diagram of a cell and mention one function of each organelle of a cell.
9. Explain transport across cell membrane.

III. Short answers on: Answer ALL questions.

(10 x 2 = 20)

1. Define diffusion and osmosis.
2. Sickle cell anemia.
3. Functions of mitochondria.
4. What is erythroblastosis fetalis?
5. Write difference between cartilage and bone.
6. Write the significance of heart sounds.
7. List out the cranial nerves and their functions.
8. Explain cell communication.
9. What are the parts of middle ear?
10. Define osteoporosis and rheumatoid arthritis.
